

Case 3210

***Catocala alabamae* Grote, 1875 (Insecta, Lepidoptera): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of *Catocala alabamae* Grote, 1875 for a small, yellow-hindwinged moth from North America (family NOCTUIDAE). The name is threatened by the earlier synonym *Catocala polygama* Guenée, 1852, which has been applied in the past to other species. The name *C. polygama* has not been used as valid for many years, and since 1938 it has been erroneously treated as a junior synonym of *C. grynea* (Cramer, 1780). It is proposed that the name *C. polygama* be suppressed.

Keywords. Nomenclature; taxonomy; Lepidoptera; NOCTUIDAE; *Catocala*; *Catocala alabamae*; *Catocala grynea*; *Catocala polygama*; moths; North America.

1. In 1852 Guenée described and illustrated (p. 105, pl. 16, fig. 2) a male specimen of a new, small yellow-hindwinged species of *Catocala* Schrank, 1802 as *Catocala polygama*. He gave the provenience of the moth as ‘Amérique septentrionale’.

2. In his revision of the Nearctic *Catocala*, Grote (1872, pp. 15–16) noted ‘I have before me a number of specimens (Canada to Virginia) which differ in appearance among themselves but which I cannot separate into species, and which I refer to Guenée’s *C. polygama*. I think we have to do with a single variable species’. Grote distributed specimens determined by him as *polygama* to many workers and thus the name *polygama* sensu Grote became widely used for one of the common and much collected *Catocala* species occurring in northeastern North America.

3. In 1875 Grote described (p. 427) another small, yellow-hindwinged species from the southern United States as *Catocala alabamae* (type locality Demopolis, Alabama). He compared *alabamae* to the ubiquitous eastern Nearctic species *C. grynea* (Cramer, 1780, index; originally published as *Phalaena grynea*).

4. In the first of two treatises on *Catocala*, Hulst (1880, pp. 6–7) placed Grote’s *alabamae* as a variety of *grynea* and treated *polygama* Guenée as valid. In his second treatise, Hulst (1884, pp. 35–39) noted, correctly, that Grote (1872) had misidentified Guenée’s species *polygama*. Hulst placed *polygama* Guenée as a synonym of *grynea* Cramer, 1780, and, to resolve Grote’s misidentification, proposed the new name *blandula* for the species the latter had called *polygama*. Hulst (1884, p. 36) noted ‘The description of *polygama*, Guen., seems to fit this species [*grynea*]; the figure [given by Guenée], which is poor, seems more like var. *alabamae*; neither description nor figure approach the insect identified as *polygama* by Grote’. Under his treatment of *blandula*, Hulst (1884, p. 39) added: ‘With regard to *polygama*, Guen., a glance at his figure Noct. 3, pl. 16, f. 2, will convince any one that this species [*blandula*] could not

have been intended. The primaries and secondaries are entirely different. The description accords with *grynea*, and the figure fits it as well as any species known to me¹.

5. Smith (1893) followed Hulst in placing both *polygama* Guenée and *alabamae* as synonyms of *grynea*, and used *blandula* for *polygama* sensu Grote. Dyar (1903) apparently avoided the issue of Grote's misidentification, and listed *polygama* as a full species with *blandula* as its synonym, and treated *alabamae* as a full species. Hampson (1913) placed *polygama* as a synonym of *grynea*, *blandula* as a synonym of *crataegi* Grote, 1876, and treated *alabamae* as a full species.

6. In their monograph of the Nearctic *Catocala*, Barnes & McDunnough (1918, p. 40) treated *polygama* Guenée as a synonym of *grynea*, and both *blandula* and *alabamae* as full species, indicating: 'It should be borne in mind that the '*polygama* Guenée', referred to by Lintner, Saunders, and others of the older authors is not the true species but probably what we have designated as *blandula* Hulst . . . Guenée's figure of *polygama* is very poor but we do not see to what other species [i.e. *grynea*] it can be referred; it is certainly not *blandula*'. In his Nearctic macrolepidopteran checklist, McDunnough (1938) followed Barnes & McDunnough's (1918) treatment of these *Catocala* names.

7. Since McDunnough (1938), the names *blandula* and *alabamae* have been used exclusively in the Nearctic literature for the respective species. Similarly, *C. polygama* has not been used as a valid name since 1938; it was listed as a synonym of *grynea* in Tietz (1972), Hodges et al. (1983) and Poole (1989), and as a synonym of *alabamae* in Forbes (1954, p. 335: 'probably *polygama* Guenée'). Unquestionably, Grote's (1872) misidentification of *polygama* Guenée, 1852, Hulst's (1884) placement of both *polygama* Guenée and *alabamae* as synonyms of *grynea*, and the relative scarcity of specimens for this group of closely related species were all responsible for the unstable position of the name *polygama* in the 19th and early 20th centuries. Dyar's (1903) catalogue was the last major taxonomic work to use the name *polygama* as valid rather than treat it as a synonym. Holland's (1903) *Moth Book*, the most widely available popular book on Nearctic moths in the 20th century, treated *C. polygama* as a full species and pictured a specimen of *C. mira* Grote, 1876 under the name *polygama*. Hence, both Dyar (1903) and Holland (1903) were responsible for continued sporadic erroneous use of *polygama* as the species name for either *blandula* or *mira* (for example, Engel, 1909; Rowley & Berry, 1910; Schroers, 1914; Leonard, 1928). Holland's mistake was well known (see Forbes, 1954, p. 335, for a succinct statement) and not repeated in the taxonomic literature, although the *Moth Book* was not corrected until its 1968 reprinting.

8. Occasionally adults of the group of closely related, small yellow-hindwinged species of *Catocala* can be difficult to determine, but as a result of recent collecting, rearing and life history work it is now firmly established that *alabamae*, *blandula* and *grynea* are all distinct species. The adults breed true, and the larvae are also readily separable. Although Guenée's original illustration (1852, pl. 16, fig. 2) of *polygama* is clearly not *blandula* Hulst, 1884, a detailed re-examination shows that it is not *grynea* either. The figure is an acceptable, albeit somewhat stylized, rendering of *alabamae*, as Hulst (1884, p. 36) originally suggested (para. 4 above). Guenée's figure of *polygama* agrees with Grote's (1875) description and type of *alabamae* (accounting for sexual differences: the *alabamae* type is a female, whereas Guenée's figure is a

male) in The Natural History Museum, London, as well as with other specimens of *alabamae* from the Gulf Coast of the southern United States, especially Florida (Gall & Hawks, in press). Thus, since McDunnough (1938), and also for the most part since Barnes & McDunnough (1918), the name *polygama* Guenée, 1852 has been erroneously treated as a junior synonym of *grynea* Cramer, 1780, rather than as a senior synonym of *alabamae* Grote, 1875. Reintroduction of the name *polygama* in place of *alabamae* would upset established nomenclatural usage and would cause considerable and unnecessary confusion, and I therefore propose that *polygama* be suppressed. Recent works which demonstrate the usage of the name *alabamae* include Forbes (1954), Sargent (1976), Covell (1984) and Poole (1989). A representative list of a further seven publications, dating from 1965 to 1999, in which the name has been adopted is held by the Commission Secretariat.

9. The International Commission on Zoological Nomenclature is accordingly asked:

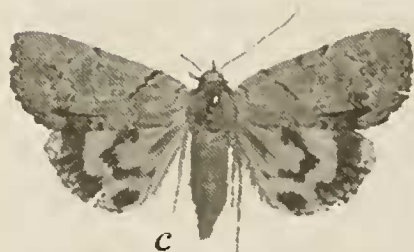
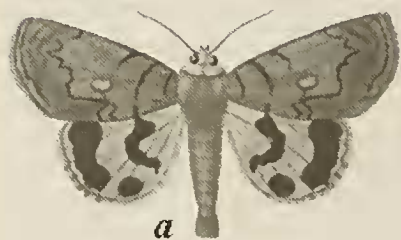
- (1) to use its plenary power to suppress the specific name *polygama* Guenée, 1852, as published in the binomen *Catocala polygama*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *alabamae* Grote, 1875, as originally published in the binomen *Catocala alabamae*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *polygama* Guenée, 1852, as published in the binomen *Catocala polygama*, and as suppressed in (1) above.

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Nearctic species of *Catocala* moths. **a:** *C. polygama* Guenée (1852), type, original drawing. **b:** *C. grynea* (Cramer, 1780). **c:** *C. alabamiae* Grote (1875), type. **d:** *C. blandula* Hulst (1884), type.